

REMARKS

In view of the following remarks, reconsideration of the rejections and further examination are requested.

Initially, the Applicant wishes to thank the Examiner and his Supervisor for conducting a telephone interview on January 3, 2008. During the interview, the applied prior art and arguments distinguishing the claims over the applied prior art were discussed. It was agreed that the feature of claim 7 regarding "the digital device is further configured to digitally record the file structure information," is not disclosed in the references cited by the Examiner. Moreover, the Examiners indicated that additional search and consideration would be required upon receipt of a response to the October 19, 2007 Office Action.

Claims 7-9 are pending in this application and stand rejected.

Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Quan (U.S. Patent No. 6,058,191). Claims 8 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Quan in view of Ohtsuka (U.S. Patent No. 5,077,734).

The Applicant respectfully traverses the above-mentioned rejections of claims 7-9 for the following reasons.

With exemplary reference to the present drawing figures, claim 7 sets forth a video signal recording apparatus DR3 for digitally recording a first video signal containing information representing a copyrighted work and information representing a non-copyrighted work, comprising: a copyright information detecting device 2 configured to extract copyright information inserted in the first video signal Sva; an active pixel period detecting device 3 configured to detect an active pixel period of the first video signal Sva, and generate an active pixel period decision signal Spe; a video signal output device 4 configured to output a second video signal Sdc containing information representing another non-copyrighted work; a video signal generating device 5 configured to generate a third video signal Sv by replacing the first video signal Sva by the second video signal Sdc in the active pixel period, upon determining, based on the copyright information and the active pixel period decision signal Spe that the first video signal Sva represents the information representing the copyrighted work; a digital

recording device 7 configured to digitally record the third video signal Sv on a recording medium as one video file AAV; a boundary detecting device configured to detect a boundary between the copyrighted work and the non-copyrighted work in the first video signal Sva; and a file structure information generating device 9 configured to generate file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in the video file, wherein the digital recording device 7 is further configured to digitally record the file structure information Sad.

Thus, claim 7 requires a video signal recording apparatus, including, in part, a boundary detecting device configured to detect a boundary between the copyrighted work and the non-copyrighted work in the first video signal, and a file structure information generating device configured to generate file structure information indicative of boundaries between a copyrighted work and a non-copyrighted work in a video file, wherein a digital recording device is configured to digitally record the file structure information.

By generating file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in the video file, replaced fixed signals are skipped and only video signals which are copying-permitted are sequentially reproduced as one file. Moreover, using the file structure information facilitates showing a user that the fixed value signals are recorded for copyright protection.

Quan discloses a modulated RF carrier signal with copy protection signals supplied by way of a lead 40 to an amplifier 42. An H-sync signal includes pseudo-sync anti-copy signals or pulses. Leads 48, 50 are coupled to a logic timing circuit 52 which generates a signal indicative of the presence of television lines containing copy protection signals. Thus, circuit 52 effectively comprises a line locator circuit which generates, for example, a low logic level on a lead 54 during an active video line in which anti-copy signals are present. The high logic level is provided on the lead 54 during the presence of the normal sync and color burst signals in the vertical blanking interval as well as during the active television field.

Moreover, Quan discloses a notch filter circuit 57 used to prevent degrading an aural RF carrier while providing for the defeat of the copy protection signal used to modulate the RF

carrier signal. A second RF source such as an RF carrier modulated by a noisy color signal, an RF carrier modulated by a color bar signal, an unmodulated RF carrier or a modulated RF carrier or other signal without sufficient anti-copy signals, is supplied via a lead 78 to a second terminal of an RF switch 76. The line location signal on the lead 54 is supplied to the RF switch 76 as a switch timing control signal, whereby the modulated RF carrier signal on lead 43 is replaced during the period of the copy protection signals with one of the selected RF signals on lead 78 which lacks any copy protection signals. The resulting reassembled output signal on an output lead 80 of the RF switch 76 thus does not contain anti-copy signals whereby acceptable recordings can be made of the video signal.

In contrast to the present invention and as discussed during the January 3, 2008 interview, Quan does not disclose a boundary detecting device configured to detect a boundary between a copyrighted work and a non-copyrighted work in a first video signal, generating file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in a video file, and digitally recording the file structure information. Instead, Quan discloses a using a circuit 52 to generate (as disclosed in col. 9, lines 20-30 of Quan) a signal indicative of the presence of the television lines (i.e., lines 10 and 20) which contain copy protection signals (i.e., a low logic level signal when anti-copy signals are present and a high logic level when they are not).

In the Office Action, the Examiner has taken the position that "lines 10 and 20" (as disclosed in column 9, lines 25-26, of Quan) correspond to the "boundary between the copyrighted work and the non-copyrighted work in the first video signal" and correspond to the "file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in the video file," as recited in claim 7. Moreover, the Examiner has taken the position that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to digitally record the copyright-disable video signal taught by Quan to increase storage efficiency." Furthermore, the Examiner has taken the position that the logic Timing Circuit 52 of Quan corresponds to the "boundary detecting device" and the "file structure information generating device," as recited in claim 7.

However, as discussed during the January 3, 2008 interview, the Examiner has not properly addressed all the features recited in claim 7. Specifically, the Examiner has not properly addressed the digital recording device being "further configured to digitally record the file structure information." As recited in claim 7, the "file structure information is indicative of boundaries between the copyrighted work and the non-copyrighted work" in a video file. The digital recording device is configured to digitally record this file structure information.

As explained during the January 3, 2008 interview, the Applicant respectfully submits that Quan teaches against recording information indicative of boundaries between a copyrighted work and a non-copyrighted work. The Examiner has taken the position that (item 3, on page 2 of the Office Action) "the boundary of the 'anti-copy signal' is between lines 10 through 20." As discussed in col. 9, lines 24-26 of Quan, lines 10-20 include the anti-copy signal. Thus, the anti-copy signal defines the boundary of anti-copy protection (i.e., the boundary between a copyrighted work and a non-copyrighted work) to be lines 10 and 20. Quan discloses in col. 7, lines 40-50, and in col. 18, lines 26-35, using various techniques to modify an incoming RF signal such that it no longer contains effective copy protection signals. That is, anti-copy pulses or color stripe signals (the signals that define the boundaries) are removed or disabled from the RF signal to enable a subsequent acceptable recording of the respective video signal. By virtue of disclosing removing or disabling anti-copy pulses or color stripe signals from an RF signal so an acceptable recording can be made, Quan teaches against recording information indicative of boundaries between a copyrighted work and a non-copyrighted work. Thus, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to provide a digital recording device configured to digitally record the anti-copy pulses and color stripe signals of Quan that are indicative of boundaries between a copyrighted and a non-copyrighted work.

The Examiner has also taken the position that logic timing circuit 52 corresponds to the file structure information generating device that generates file structure information indicative of boundaries between a copyrighted work and a non-copyrighted work. The Examiner asserts that lines 10 and 20 constitute the file structure information. However, logic timing circuit 52 simply

generates (as disclosed in col. 9, lines 20-30 of Quan) a signal indicative of the presence of the television lines (i.e., lines 10 and 20) which contain copy protection signals. Circuit 52 does not generate the file structure information of lines 10 and 20 themselves, as required in claim 7. Nor does circuit 52 generate the anti-copy signals present in active video lines. Thus, logic timing circuit 52 does not correspond to the file structure information generating device as recited in claim 7.

Based on the above discussion, it is apparent that Quan teaches against recording information indicative of boundaries between a copyrighted work and a non-copyrighted work, and teaches using a circuit 52 to generate (as disclosed in col. 9, lines 20-30 of Quan) a signal indicative of the presence of the television lines (i.e., lines 10 and 20) which contain copy protection signals (i.e., a low logic level signal when anti-copy signals are present and a high logic level when they are not). In other words, Quan does not disclose a video signal recording apparatus having a boundary detecting device configured to detect a boundary between a copyrighted work and a non-copyrighted work in a first video signal, and a file structure information generating device configured to generate file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in a video file, wherein a digital recording device is configured to digitally record the file structure information.

The Examiner cited the Ohtsuka reference for disclosing a clock capable of identifying a period shorter than a frame period of the first video signal. More specifically, Ohtsuka discloses an electronic exchange apparatus for a digital network such as an Integrated Service Digital Network (ISDN). However, it is clear that Ohtsuka fails to disclose or suggest the boundary detecting device and file structure information generating device of the video signal recording apparatus, wherein a digital recording device is configured to digitally record the file structure information, as recited in claim 7. Therefore, Ohtsuka fails to address the deficiencies of Quan. As a result, claim 7 is patentable over the combination of Quan and Ohtsuka.

For at least the reasons set forth above, it is believed clear that claim 7, and claims 8 and 9 depending therefrom, are not anticipated by Quan. Further, it is submitted that there is no teaching or suggestion in the prior art of record that would have caused an ordinary artisan to


modify Quan in such a manner as to result in, or otherwise render obvious, the invention of claim 7, and claims 8 and 9 depending therefrom. Therefore, it is submitted that claims 7-9 are clearly allowable over the prior art of record.

In view of the foregoing remarks, all of the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe that there are any remaining issues that must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Tokuji KURODA

By: 
Kevin McDermott
Registration No. 48,113
Attorney for Applicant

KM/CRW/km
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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